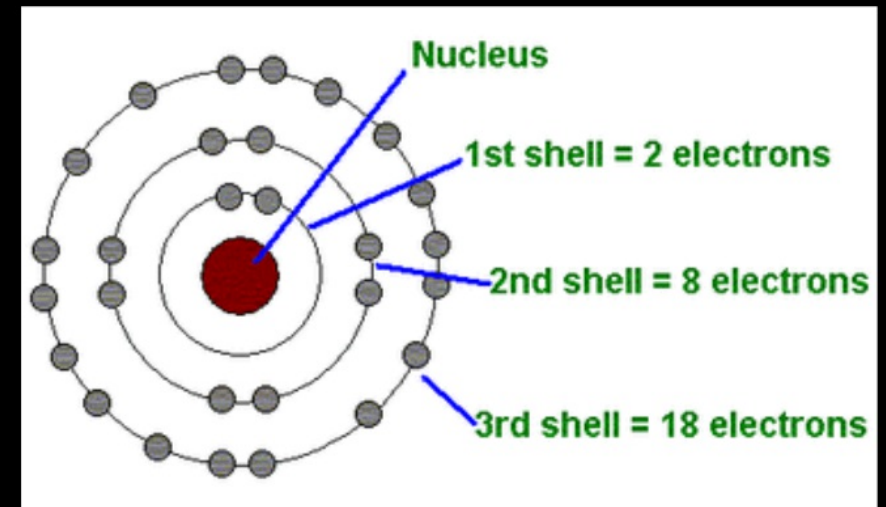


2.24.20

Atomic Structure: Bohr Atoms

Today's Objectives:

- Create a Bohr atom
- Place electrons in the correct level
- Learn the Octet Rule of electrons



- In the Bohr atom, electrons are in fixed Energy Levels or Rings or shells.
(“Bulls-eye”)

MAX ELECTRONS ($2n^2$)

n = 1 2 e⁻

n = 2 8 e⁻

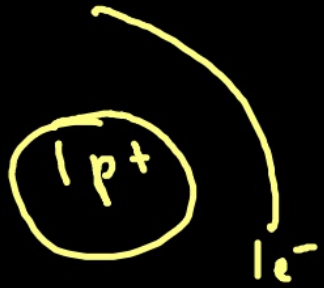
n = 3 18 e⁻

n = 4 32 e⁻

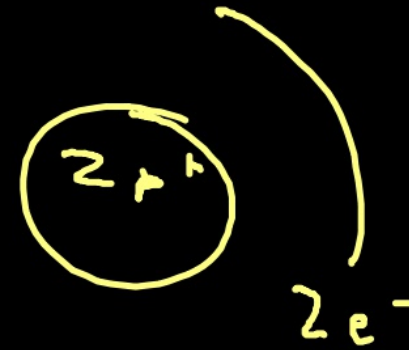
← closest to nucleus,
always fills up first.

Bohr Atom Drawing

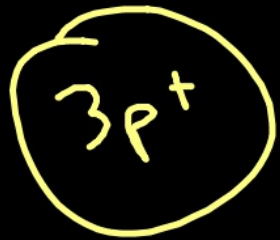
Hydrogen



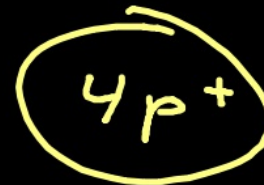
Helium



Lithium $3p^+$
 $3e^-$



Beryllium $4p^+$
 $4e^-$



Oxygen

$8p^+$
 $8e^-$

$8p^+$

$2e^-$

$6e^-$

Neon

$10p^+$
 $10e^-$

$10p^+$

$2e^-$

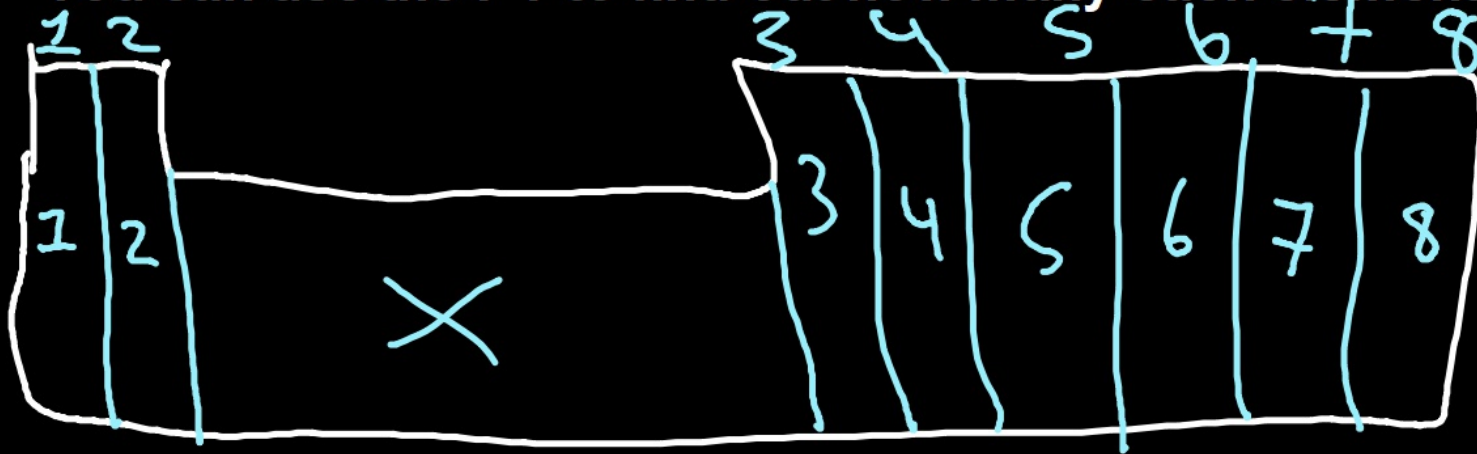
$8e^-$

An atom's outermost electrons are called Valence electrons.

— Used in bonding to other bonds

Shortcut:

You can use the PT to find out how many each element has.



Equal
to
Group
#